

## REMARKS

Favorable consideration and allowance of the claims of the present application are respectfully requested.

In the present Official Action, Claims 1, 2, 4, 6-10, 12-14, 17-21 and 23-28 have been Finally Rejected under 35 U.S.C. §103(a) as allegedly unpatentable over by Ishiyama et al. (US Patent Application Pub. No. US 2005/0102415) ("Ishiyama") in view of Zhu et al. (US Patent Application Pub. No. US 2003/0167339) ("Zhu") and Patel. et al. (US Patent No. 7,149,778) ("Patel").

Further in the Office Action, Claims 3 and 20 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Ishiyama in view of Zhu and Patel and in further view of Ito et al. (US Patent Pub. US 2003/0036921)("Ito").

Claims 5 and 22 were further rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Ishiyama in view of Zhu and Patel and further in view of "Official Notice".

Claim 11 was further rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Ishiyama in view of Zhu and Patel and further in view of O'Brien et al. (US Patent No. 6,587,831) ("O'Brien").

Claims 15, 16, 29 and 30 were further rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Ishiyama in view of Zhu and Patel and further in view of Frengut et al. (US Patent No. US 2002/0046099) ("Frengut").

With respect to the rejections of Claims 1, 2, 4, 6-10, 12-14, 17-21 and 23-28 under 35 U.S.C. §103(a) as allegedly unpatentable over by Ishiyama in view of Zhu and Patel, applicants respectfully disagree.

In response, applicants amend herein amend Claims 9 and 26 to extract language directed to the first and second services as comprising Web services (i.e., web-based services) and incorporating this language in independent Claim 1 (and similarly in independent Claim 18) to clarify that the present invention is directed to provision of Web-based services (e.g., programmed XML, HTTP, XML, XML Schema- based applications, and SOAP, UDDI and WSDL protocols) that have a distinct meaning in the art as described and included in the present application as originally filed at paragraph [0014].

Thus, Claim 1 is being amended to set forth a method implemented by a computing device for real-time dynamic switching between a first service provider providing a first Web-based service for users via a program executing at a user's computer device over a communications network in accordance with a service level agreement between a user and said first service provider and a second service provider adapted for providing a second Web service for users at a user's computer device, said method comprising the steps of:

automatically monitoring said first Web-based service for determining compliance of service-level guarantees according to said service level agreement by said first service provider at said user's computer device, said monitoring including accessing internal functioning of said first Web-based service that is currently in use; and,

upon determining non-compliance of said service-level guarantees, locating said second service provider for providing said second Web-based service according to service-level guarantees compatible with needs of said executing program;

maintaining state information that the program has created in the first Web service provided by said first service provider at said user's computer device;

terminating said service level agreement between said user and said first service provider;  
and

switching provision of said second Web-based service to said user's computer device  
from said second service provider over said communications network; and,

migrating said state information maintained up to the time of switching to said second  
web service provided by said second service provider, said state information including state  
information maintained by said first web service provider on behalf of a user, wherein the  
switching occurs in a manner substantially transparent to the user,

wherein a switching criterion for initiating said switching includes one or more selected  
from the group comprising: the relative prevalence of advertisements or SPAM, the relative  
usability of a user interface provided at computer device, the relative cost of the service provided  
by said second service provider as compared to a cost of the service provided by first service  
provider, a relative cognitive load of a user, and, a relative security of said service provided by  
said second service as compared to the service provided by first service provider

Respectfully, no new matter is being entered by this amendment as clear support is found  
in the specification of the originally filed application, e.g., at paragraphs [0014], [0018], [0027].  
The present amendment under Rule 116 seeks to amend claims to address the Examiner's broad  
interpretations of the prior amended claims 1 and 18 as was articulated for the first time in the  
present office action (final rejection), and consequently, could not have been earlier presented.

As a primary distinction, the Claim 1 has been amended to positively recite that the  
provision of a program executing at a user's computer device interacts with a first Web service  
provided by a first service provider over a communications network; and further, that the  
provision of the first Web service is in accordance with a service level agreement between a user

and the first service provider. Respectfully, at the outset, the teachings of Ishiyama, whether taken alone or in combination with Zhu and Patel, do not teach for the real-time dynamic switching between a first service provider providing a first Web service for users via a program executing at a user's computer device over a communications network in accordance with a service level agreement between a user and said first service provider and a second service provider adapted for providing a second Web service for users.

Moreover, the teachings of Ishiyama, whether taken alone or in combination with Zhu and Patel, do not teach automatically monitoring the first Web-based service for determining compliance of service-level guarantees according to said service level agreement by said first service provider at said user's computer device, said monitoring including accessing internal functioning of a service that is currently in use,

At best, Ishiyama's sole innovation is the determining a router device's connectivity to an Internet Service Provider (ISP) that provides access to the internet. Such, an ISP, as argued hereinbelow, does not provide web services as contemplated by the present invention. Thus, any monitoring that is performed in Ishiyama is performed at the router device to determine that device's physical connectivity to the Internet in the first instance (i.e., a network connection). This is not the same as automatically monitoring the first Web-based service for determining compliance of service-level guarantees according to said service level agreement as now claimed in amended Claims 1 and 18.

Moreover, Ishiyama, whether taken alone or in combination with Zhu and Patel, neither teach nor suggest what happens upon determining of non-compliance of said service-level guarantees, that is, the locating of the second service provider for providing said second Web-based service according to service-level guarantees compatible with needs of said executing

program; maintaining state information that the program has created in the first Web service provided by said first service provider at said user's computer device; terminating said service level agreement between said user and said first service provider; and switching provision of said second Web-based service to said user's computer device from said second service provider over said communications network.

These limitations of claims 1 (and similarly, amended Claim 18) is taught in the present invention at paragraph [0018], for example. It is noted that the amendment clarifies the claim element directed to maintaining state information that the program has created in the first Web service provided by said first service provider at said user's computer device which is not taught in any of the cited prior art; and, further clarifies the terminating step as terminating the service level agreement between said user and the first service provider, again not taught in any of the cited prior art.

With respect to the rejection of Claims 9 and 26 whose subject matter directed to provision of first and second Web services—now incorporated in Claims 1 and 18 — was rejected in view of Ishiyama taken alone or in combination with Zhu and Patel, applicants respectfully disagree. The Examiner appears to interpret that provision of an Internet Access service such as provided by the ISP in Ishiyama is the same as provision of a Web-service, whose meaning is distinct as described herein above. However, in distinction, Ishiyama's ISPs (as shown in Ishiyama Fig. 1) are only concerned with providing packet routing connectivity to a network for a client computer and, functionally, only provides connectivity monitoring, at a router device. This activity is actually a pre-cursor activity before the provision of any Web service can be provided between a web server and a client computer and, inherently can not rise to the level of providing a Web service having service level guarantees according to a service level agreement

as now claimed in amended Claims 1 and 18. That is, Ishiyama's teaching of the provision of Internet access services is not a teaching of Web services as now claimed. Web Services are a much higher-level construct than "Internet access." Web Services can and are used on networks other than the Internet. The messaging protocols of Web Services include, but are not limited to, messaging protocols supported on the Internet.

Other distinctions between claims 1 and 18 as amended and the cited prior art references are now set forth as follows:

Ishiyama, whether taken alone or in combination with Zhu and Patel, concern *only* connectivity and not internal functioning of the first Web service as the Claims 1 and 18 currently set forth. Connectivity can be affected by many problems, including a failure of the communications network between the router and the ISP. Thus, it is respectfully submitted that the Examiner's asserting that monitoring connectivity is equivalent to monitoring internal functioning of a Web service is incorrect.

Moreover, contrary to the Examiner's position in the office action, Ishiyama teaches *only* an initial connectivity function prior to a server provision of web services; consequently this is not a service-level guarantee as connectivity alone is binary: either a device is connected, or it is not. Ishiyama apparently is silent as to satisfaction or compliance with service level guarantees according to a service level agreement as contemplated by Claim 1 and 18 as amended. Ishiyama contemplates switching based on connectivity alone, and not based on service-level guarantees as provided according to a service level agreement between a Web service and the user's executing program.

Further, in the office action, with respect to the limitation directed to "transferring state information..." amendments to Claim 1 and 18 obviate the rejection asserted by the Examiner

that Ishiyama allegedly teaches transferring state information associated with the user's use of the service. The present invention as amended, now recites migrating said state information maintained up to the time of switching to said second web service provided by said second Web service provider, said state information including state information maintained by said first web service provider on behalf of a user (as taught in paragraph [0027] of the applicants' present specification). Ishiyama appears to teach that *only* the state information present on the user's computer device is maintained in Ishiyama and not maintained by said first web service provider on behalf of a user. Thus, in Ishiyama, no state information present at the switched-from ISP is transferred to the switched-to ISP and such information is not maintained. The present invention rather teaches and claims a more comprehensive solution.

Further in the office action, with respect to the rejection of Claims 1 and 18, the examiner appears to believe that the service provided by the switched-from ISP is terminated in Ishiyama. Respectfully, in view of the amendment to Claims 1 and 18, this is now not the case as there appears no teaching nor suggestion of a mechanism in Ishiyama to notify the switched-from ISP that its service is to be terminated. That is, Ishiyama does not teach terminating the service level agreement between said user and said first Web service provider. In Ishiyama, rather, its service is continued, but without connectivity to the client.

Thus, in view of the foregoing, the Examiner is respectfully requested to withdraw the rejections of amended Claims 1 and 18 under 35 U.S.C. §103(a) and, additionally, withdraw the rejections of all remaining Claims under 35 U.S.C. §103(a).

This application is now believed to be in condition for allowance, and a Notice of Allowance is respectfully requested. If the Examiner believes a telephone conference might

expedite prosecution of this case, it is respectfully requested that he call applicant's attorney at (516) 742-4343.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Steven Fischman', followed by a horizontal line.

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